



AETS ENERGY TRAINING PROGRAM 2023



Take your career to the next level with AETS training programs!

Presentation

AETS was Created in 1997 as a multidisciplinary consulting and leading training provider company in the fields of electrical systems, renewable energies, transportation, environment, and sustainable development. AETS has been providing specialist services to institutional clients (European Commission, Agence Française de Développement, World Bank, among others) and their beneficiaries, as well as to private clients. These services are based on the management of development and cooperation projects, the implementation of European Union and national public policies, or basic infrastructure and production sector projects in a field of intervention that includes:



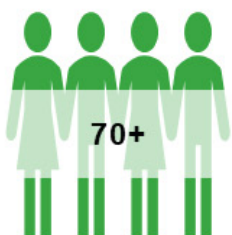
STAFF

OPERATION

OFFICES

WORKED IN

TURNOVER



70+



25+ years



8



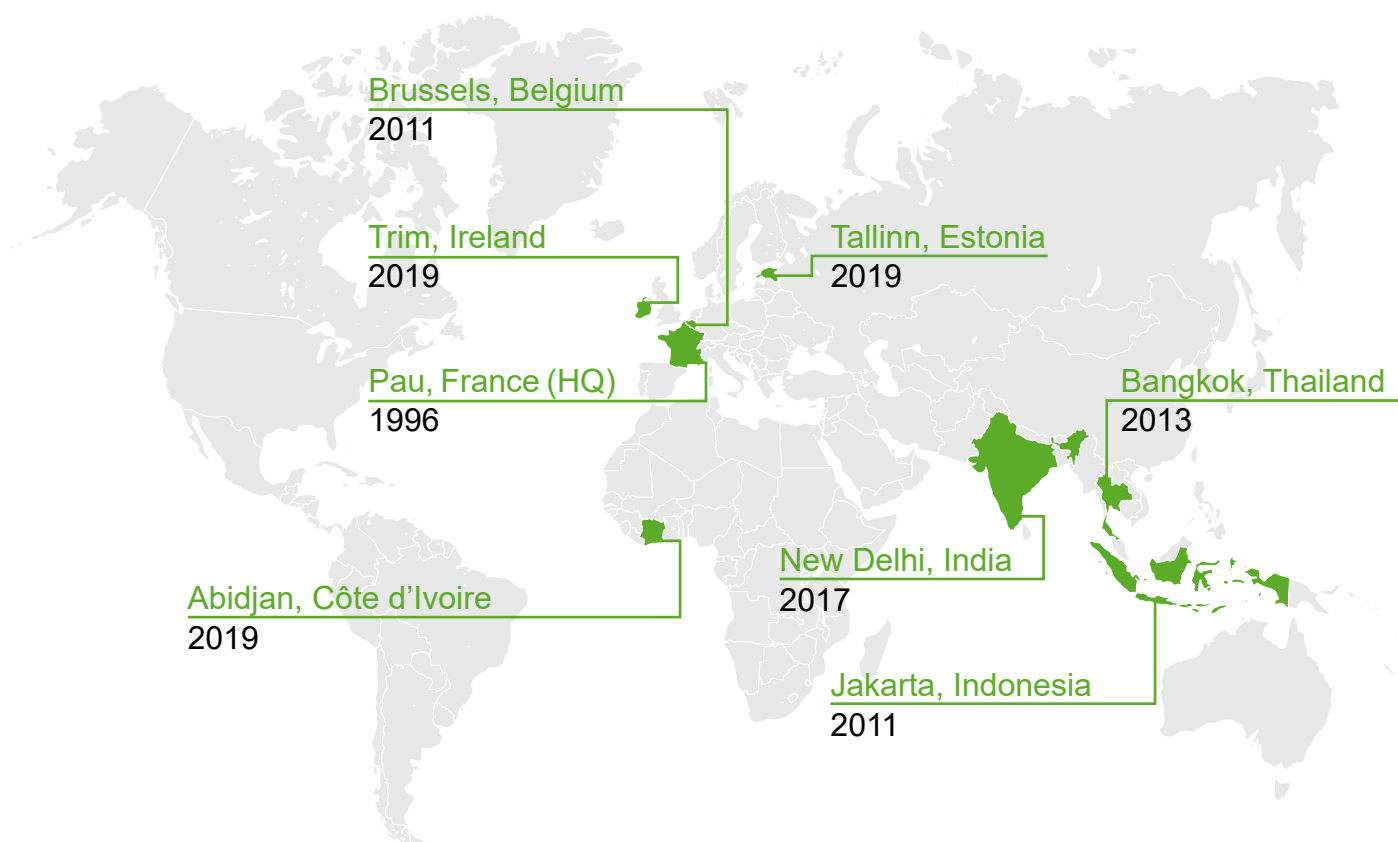
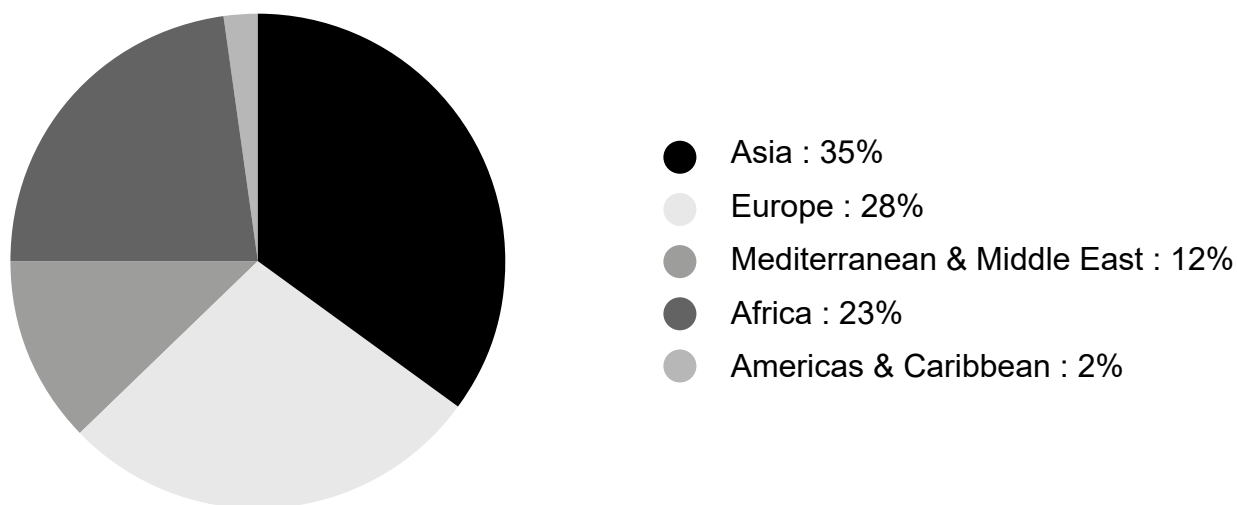
180



€21 million

2022

Geographic distribution of projects



AETS has successfully delivered projects in over 180 countries worldwide. To do so, AETS relies on offices in France (Lons - headquarters), Belgium (Brussels), Côte d'Ivoire (Abidjan), Thailand (Bangkok), Indonesia (Jakarta), India (New Delhi), and Ireland (Trim).

Our values

Excellence

We make sure to deliver the highest quality service, bolstered by our comprehensive approach and proven in-house expertise, the know-how of our global network of trusted local specialists, as well as our rigorous quality assurance processes.

Integrity

We strive to do the right thing, through governance that maintains our transparency and independence, while ensuring that we remain open and adaptable to new and differing ideas.

Responsibility

We are committed to making decisions and providing services that contribute to the advancement of environmental, social, and economic sustainability, going beyond mere compliance by proactively offering value-added solutions to pivotal challenges such as the climate crisis and global inequalities.

Equal Opportunities

We celebrate diversity among our colleagues and throughout society, recognizing that ensuring truly inclusive processes across our activities, based on principles of equal opportunities and non-discrimination, means better outcomes for our clients and the communities we work in, as well as for our future as a company.

Quality and Environmental Management System (QEMS)

Since 2010, AETS has been operating in the context of a Quality Management System (QMS) **certified according to the ISO 9001 standard** comprising “Consultancy, Studies, Technical Assistance, Training Design” and is also certified according to the ISO 14001 standard since 2019, adding the environmental dimension.

In July 2022, AETS received the renewal of its ISO 9001 and ISO 14001 certifications. These renewals demonstrate the solidity of AETS’ Quality and Environmental Management System (QEMS) and its compliance with the requirements relating to the quality and environmental consideration of its processes.



AETS energy training program

Welcome to AETS Training Programs! Our training programs are designed to meet the needs of professionals at all levels of experience, from entry-level to senior executives. We offer a range of training courses in the following areas:

- Transportation Networks ;
- Distribution Networks ;
- Electrical Master Plans ;
- Renewable Energies ;
- Energy Efficiency (Energy audit, ISO 50001, Carbon footprint) ;
- Energy Efficiency in Buildings ;
- Economic and financial studies ;

AETS provides customized training programs that keep up with the latest industry developments and trends. We tailor our courses to suit the needs and abilities of our diverse and global clientele. Our multidisciplinary and international team of experts includes engineers, economists, analysts, and legal and regulatory specialists. They have hands-on experience in the energy sector in Asia, Africa, and Latin America. They offer practical guidance and real-world scenarios through our training courses. They also participate in various energy-related activities, such as project and program evaluation, technical and economic advice, tariff studies, tender preparation, and assessment.

AETS offers specialized services to institutional clients such as the European Commission, Agence Française de Développement, World Bank, and Asian Development Bank as well as private clients. AETS maintains close collaborations with key decision-makers in the industry and energy sectors, including the Ministry of Industry and Environment, ADEME (Agence de l'Environnement et de la Maitrise de l'Energie), and the former IFE (Institut Français de l'Energie). AETS consultants provide support services to industrial companies, local authorities, and other public entities operating within these sectors.

AETS training team develops professional training modules every year on various topics, focusing on values that directly enhance operational efficiency, technological innovation, risk management awareness, and skills development. AETS is registered as a training agency with the Ministry of Employment under number 72-64-0273-64.



Electrical transmission networks

- The World of Energy and Its Fundamentals
- Functions and Operation of Electrical Systems
- Overview of Transmission Networks
- Numerical Command Control of High-voltage Substations
- Telecommunications for Transmission Networks
- Supervision and Remote Control of Transmission Networks
- Role of Operators in Dispatching and Team Organization
- Case Studies and Practical Exercises

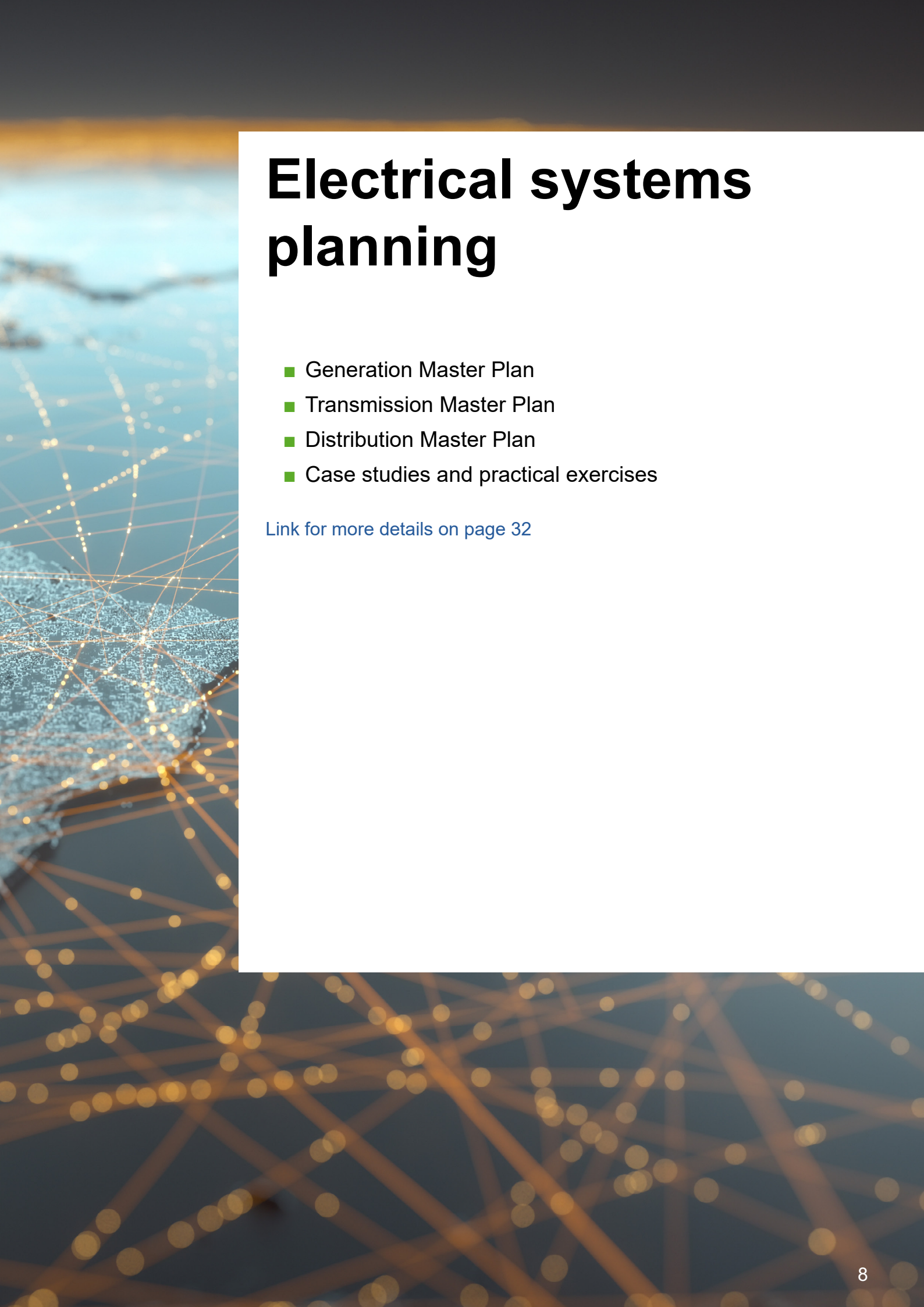
[Link for more details on page 20](#)



Electrical distribution networks

- Functions and Operation of Distribution Networks
- Grid Based Networks
- Isolated Distributions Networks
- Automation and Control and Distribution Networks
- Telecommunications for Distribution Network
- Case Studies and Practical Exercises

[Link for more details on page 27](#)



Electrical systems planning

- Generation Master Plan
- Transmission Master Plan
- Distribution Master Plan
- Case studies and practical exercises

[Link for more details on page 32](#)



Renewable energies

- Renewable Energy and Its Constraints, Brakes, and Barriers
- Solar Energy Technologies and Applications
- PV Systems
- Solar PV Systems Monitoring and Control
- Solar Thermal System Designs
- Energy Storage
- Case Studies and Group Exercises

[Link for more details on page 36](#)



Energy efficiency

(audit, ISO 5001, carbon footprint)

- Energy Efficiency
- Energy Audit
- ISO 50001
- Energy Management System
- Carbon Footprint

[Link for more details on page 43](#)



Energy efficiency in buildings

- Building Design
- Building Environment
- Building Energy Auditing
- Building Energy Policy and Regulation
- Case Studies and Group Exercises

[Link for more details on page 46](#)



Economic and financial studies

- Investment Project Cycle
- Principles of Economic Analysis
- Understanding the Financial Statements
- Time Value of Money and Discounting
- Investment Appraisal Techniques
- Cost-benefit Analysis
- Payback Period, Net Present Value (NPV), Internal Rate of Return (IRR)
- Sensitivity Analysis
- Risk and Uncertainty in Investment Appraisal
- Investment Proposal Development and Presentation
- Case Studies and Practical Exercises

[Link for more details on page 51](#)

Experts team



Joseph ORDOQUI

Joseph Ordoqui (Economist, Tariffs) is an electrical engineer and energy sector consultant with expertise in planning and economic and financial studies of production means and networks. He graduated from Supélec and has over 30 years of experience in the industry, mainly in the area of pre-investment studies for electrical infrastructure projects financed by international institutions. He has provided assistance to numerous governments and electrical companies in the area of energy policies, development of electrical systems, and the identification and evaluation of projects.



Jérôme GAONACH

Jérôme Gaonach (Smart Grid Expert) is an expert in the area of network management systems (SCADA/EMS/DMS) and Smart Grid technologies. He has over 25 years of experience as an engineer in the energy sector and has worked for some of the largest industrial groups, such as Schlumberger Industries, AREVA, and ALSTOM before turning to the consulting industry. He graduated from Supélec and has extensive experience in information technologies and especially in solutions that promote the integration of renewable energy in networks.



Jorge ROLA

Jorge Rola (Smart Grid Expert) is an engineer specializing in Advanced Distribution Management Systems (ADMS) for the management of electrical distribution networks. He graduated from Supélec and has over 30 years of experience in the area of automation and the progressive digitization of alternating and direct current electrical transport and distribution networks, in large companies such as CEGELEC, ALSTOM, AREVA, and Schneider Electric. Today, with his vast experience, he works as a consultant in the area of digital transformation of utilities, which is increasing in response to the major challenge posed by global warming.



Sébastien JULIEN

Sébastien Julien has 20 years of experience in the management and operation of transmission and distribution networks. He was trained in network management as a dispatcher at RTE on the Nancy site, managing the Eastern France Transport network with interfaces with the SER network. He then held various positions within GEG/GreenAlp, including project management for the modernization of Technical IS (SCADA, GIS, etc.). He is now responsible for the Network Operations department. He manages the conduct, operation, maintenance, and works teams. At the same time, he has more than 5 years of experience in consulting, auditing, and training on the implementation or modernization of SCADA and Smart Grid projects (Mali, Niger, Libya, Vietnam, Cambodia, Tanzania, Mayotte, etc.).



Ali HAMMACHI

Ali Hammachi is a telecommunications expert for electrical networks with over 20 years of experience. He specializes in telecommunication systems using various technologies, such as analogue, digital, optical and radio (PLC, SDH, PDH, tele protections, routers, PABX and related equipment, UHF/FH, and GSM). He also has skills in supervision systems, telecommunications audits, specifications writing, approval documents, factory and site acceptance documents, deployment strategy documents, telecommunication equipment and systems commissioning, telecommunication network extension, optical fibres analysis, network management, commissioning issues resolution, telecommunication equipment interoperability testing and customer and vendor interface management.



Huy TU-HUNG

Huy Tu-Hung has over 30 years of experience as a graduate engineer in the energy sector. He has expertise in various fields, such as HVB protection and control, SCADA systems and electrical protection systems. He started his career as a computer engineer at Procter & Gamble and then worked as a project engineer at Astom Power from 1991 to 1999. He managed power plant projects from 20-120 MW in the USA (Bechtel), Indonesia (PLN), China and the Netherlands. He was the Head of Automation export areas (automation of electrical substations, protection systems) at Schneider Electric for India and English-speaking Africa from 1999 to 2021.



Zakaria EL ABID

Zakaria EL ABID is an expert in energy efficiency, renewable energies, photovoltaic installations, and has significant experience in managing complex projects, some of which cost several million euros, in the energy field, both nationally and internationally. Zakaria has helped many companies and establishments assess the technical and economic issues related to the implementation of photovoltaic solar production facilities to reduce consumption. He also has expertise in ISO 50001, a standard for energy management systems, and carbon balance assessments. Additionally, he possesses strong proficiency in software tools to carry out the necessary simulations for studying the potential of photovoltaic installations. Furthermore, Zakaria taught courses for 3 years on the economic analysis of energy efficiency projects at the University of Pau and the Pays de l'Adour (France).



Djamel IKNI

Djamel IKNI is an engineer with more than 12 years of experience in the energy sector. He has worked for industrial groups such as Renault, Port du Havre, CODAH community, and research laboratories such as GREAH, 2IE Burkina, before becoming a consultant. He holds a Ph.D. from the University of Le Havre and has expertise in the transmission and distribution of electrical networks, the integration of renewable energies and control (SCADA), and Smart Grid technologies.



Mukesh KUMAR

Mukesh KUMAR is a graduate engineer with expertise in energy efficiency, renewable energy systems, and electrical systems. He has worked on many innovative projects in different countries with energy labs and industries in the field of energy transition and climate change. He also assessed the potential of photovoltaic technologies, solar thermal collectors, and hybrid solar technologies for meeting the energy needs of agricultural greenhouse buildings, aiming to reduce energy consumption and carbon footprint.



Adel MOURTADA

Adel Mourtada is an Energy Efficiency Expert. He is Engineer and has two PhD in Thermal and Energy conversion. He has conducted studies aiming at improving the efficiency of the energy systems in buildings and industrial plants and at modelling of renewable energy systems (PV, Wind energy, CSP, etc.). He developed energy efficiency building codes and green building rating systems for several countries (Lebanon, Morocco, Tunisia, Algeria, Ivory Coast, Kenya, Rwanda, Uganda, Azerbaijan, Turkey, etc.). His experience includes all the main systems consuming thermal energy and electricity and all renewable energy technologies. He carried out several market needs assessment studies to evaluate the potential of Energy Efficiency (EE), Renewable Energy (RE), and Environmental Performance (EP) projects and to better understand the needs, opportunities, and barriers that have so far hindered the growth of RE, EE, and environmental investments (MEDA region, MENA region and Eastern European countries). He has more than 25 years of experience in consulting, energy audit, and training on Energy Management, Energy Performance Certification of buildings, Performance Contracting, Measurement & Verification, Management of Raw Materials & Water in industry, Assessment of Green Building, Climate Change, Climate Finance and Funding sources.

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LIST OF TRAININGS

Transmission networks



1. Transmission networks: main principles and their components

1.1. The world of energy and its fundamentals

Objective

- Provide an understanding of the fundamentals of world energy and its historical evolution.
- Introduce the electrical systems, generation, and transmission networks.
- Learn the necessary skills to evaluate the energy demand, supply trends, and projections.
- Develop practical skills through group exercises and case studies.

Prerequisite

- Basic knowledge of electrical systems (generation, transmission, and distribution)

Content

- Overview of the energy sector: history, evolution, and current state of the industry
- Energy sources: fossil fuels, renewable energy, nuclear energy, and others
- Overview of electrical systems and components
- Introduction to energy generation
- Different methods of generating electricity
- Energy demand, supply trends, and projections
- Policies, regulations, and market mechanisms in shaping the energy sector: national and international frameworks, subsidies, carbon pricing, and energy markets
- Introduction of transmission and distribution networks
- Role of electrical transmission networks in energy supply
- Case studies and group exercises

Audience

- Electrical engineers, technicians, operators, and students in the domain of electrical systems and transmission networks.

Benefits

- Gain the comprehensive understanding of world energy and the role of electrical transmission networks in energy supply.
- Develop skills in Energy demand, supply trends, and projections.

Duration
2 days

1.2. Functioning and operations of the electrical system

Objective

- Provide an understanding of the functions and operation of electrical systems, including power generation and transmission networks.
- Equip participants with the knowledge and skills necessary to operate and maintain electrical systems and transmission networks.
- Explore the challenges and opportunities facing electrical transmission networks in the context of the transition to a more sustainable energy future.
- Learn from case studies and group exercises that illustrate real-world challenges and solutions in the operation of electrical transmission networks.

Prerequisite

- Basic knowledge of electrical systems and transmission networks

Content

- Introduction to the electrical system and its components
- Discover key operating points of an electrical network
- Understand the technology of power system
- Single-phase and three-phase AC systems
- Power types and quality
- High, medium, and low voltages systems
- Generation, transmission, and distribution of electricity
- Transmission network and its components and their characteristics
- Electrical network planning and design principles
- Transmission network configuration and its expansion and upgrade
- Operation and maintenance of electrical systems and transmission networks
- Emerging challenges and opportunities for electrical transmission network
- Case studies of electrical networks and group exercises

Audience

- Electrical engineers, technicians, operators, and students in planning, operation, and maintenance of electrical systems and transmission networks.
- Energy analysts and sustainability professionals were interested in transmission systems.

Benefits

- Understanding of the operation of electrical systems, including power generation and transmission networks.
- Develop skills and knowledge necessary to operate and maintain electrical transmission networks.
- Exposure to the latest technologies and trends in power systems and transmission networks.

Duration
3 days

2. Numerical command control of high-voltage substations

Objective

- Provide the basics of high-voltage substations and electrical transmission networks.
- Introduce participants to the principles of numerical command and control systems and their application in high-voltage substations.
- Provide participants with an understanding of the various components and systems used in numerical command and control systems.
- Familiarize participants with the operation and maintenance of numerical command and control systems in high-voltage substations.

Prerequisite

- Basic knowledge of electrical systems and transmission networks

Content

- Introduction to high voltage substations and their equipment
- Overview of numerical command and control systems
- Components of numerical command and control systems
- Control and protection schemes used in high-voltage substations
- Operation and maintenance of numerical command and control systems
- Troubleshooting techniques and fault diagnosis
- Cybersecurity issues in numerical command and control systems
- Future developments and trends in numerical command and control systems
- Case studies on the application of numerical command and control systems for the protection of high-voltage transmission networks

Audience

- Electrical engineers, technicians, operators, and students who are involved in the operation and maintenance of high-voltage substations and electrical transmission networks.

Advantages

- Improve knowledge and skills in numerical command and control of high-voltage substations
- Better understanding of the principles of electrical transmission networks
- Improve ability to operate and control high voltage substations using numerical systems.
- Improve career prospects and opportunities for career advancement in the electrical transmission industry.

Duration
2 days

3. Telecommunications for transmission networks

Objective

- Provide an understanding of the telecommunications infrastructure required for the efficient and reliable operation of electrical transmission networks.
- Familiarize participants with various types of telecommunications technologies and their application in electrical transmission networks.
- Train participants in the design, installation, and maintenance of telecommunication systems for transmission networks.
- Learn practically from case studies of telecommunication systems of the transmission network in different countries

Prerequisite

- Basic understanding of electrical transmission networks and telecommunications.

Content

- Introduction to telecommunications in electrical transmission networks
- Types of telecommunication systems used in transmission networks
- Communication protocols used in electrical transmission networks
- Design considerations for telecommunication systems in transmission networks
- Installation and implementation of telecommunication systems in transmission networks
- Maintenance and troubleshooting of telecommunication systems
- Regulations and standards governing communication systems
- Case studies and best practices of telecommunication systems in transmission networks

Audience

- Electrical engineers, technicians, operators, and students working in electrical power transmission networks and telecommunications.

Benefits

- Develop skills in telecommunications infrastructure required for efficient and reliable operation of electrical transmission networks.
- Familiarize with various types of telecommunications technologies and their application in electrical transmission networks.
- Learn about the design, implementation, and maintenance of telecommunications systems in electrical transmission networks.

Duration
2 days

4. Supervision and remote control of transmission networks

Objective

- Provide an understanding of the principles and techniques of supervision and remote control of electrical transmission networks.
- Learn how to monitor, control, and protect the transmission system using modern supervision and control tools.
- Learn practically from case studies of modern supervision and control tools.

Prerequisite

- Basic understanding of electrical transmission networks, power system components and operations, and basic computer skills.

Content

- Principles of supervision and remote control
- Supervision and control systems architecture and components
- Data acquisition and processing
- Remote terminal units (RTUs) and programmable logic controllers (PLCs)
- HMI and SCADA/DMS systems,
- Protection schemes for transmission networks (overcurrent protection, differential protection, distance protection, etc.)
- Fault detection and diagnosis
- Cybersecurity and data protection
- Design and installation of supervision and remote control
- Alarm management and event notification
- System backup and restoration
- Case studies and best practices of modern supervision and control tools

Audience

- Electrical engineers, control engineers, automation engineers, system operators, maintenance personnel, students, and anyone involved in the supervision and control of electrical transmission networks.

Benefits

- Improve their knowledge and skills in the supervision and control of electrical transmission networks.
- Improve their job performance and productivity in the supervision and control of electrical systems.

Duration
3 days

5. Role of operators in dispatching and team organization

Objective

- Learn the role of operators in the dispatching and team organization of electrical transmission networks.
- Identify the key responsibilities and duties of operators in maintaining the reliability and security of the transmission network.
- Provide knowledge and skills necessary to effectively dispatch and coordinate team activities.
- Learn practically from case studies and hands-on exercises to reinforce dispatching concepts.

Prerequisite

- Basic understanding of electrical systems and transmission networks, as well as some experience in their operation or maintenance.
- Familiarity with dispatching software and communication protocols is a plus.

Content

- Roles and responsibilities of operators in dispatching and team organization
- Dispatching procedures and protocols
- Team organization and coordination
- Communication and teamwork
- Safety procedures and emergency response
- Equipment and technology used in dispatching and team organization
- Best practices for maintaining system reliability and minimizing downtime
- Case studies and hands-on exercises to reinforce dispatching concepts

Audience

- Electrical engineers, control engineers, automation engineers, system operators, maintenance personnel, students, and anyone involved in the operation and maintenance of the system.
- Suitable for engineers, operators, and technicians seeking to enhance their knowledge of electrical transmission network operation.

Benefits

- Gain the deep understanding of the role of operators in dispatching and team organization.
- Learn the strategies and techniques for maintaining system reliability, responding to emergencies, and communicating effectively with other members of the team.
- Improve their job performance and productivity in dispatching and team organization.

Duration
2 days



Distribution networks

1. Prerequisites for utility networks and their components

1.1. Grid based networks

Objective

- Provide an understanding of the functions and operation of distribution networks.
- Equip participants with the knowledge and skills necessary to operate and maintain electrical systems and distribution networks.
- Learn from case studies and group exercises that illustrate real-world challenges and solutions in the operation of interconnected distribution networks.

Content

- Introduction to electrical distribution networks
- Components of the distribution network (control, protection)
- Functioning and roles of the components in the distribution network
- Construction strategy of reliable distribution network
- Interconnected Networks
- Advantages, types of interconnections, and system stability
- Distribution Substations: types, functions, and components
- Distribution Transformers: types, ratings, and protection
- Setting up of planning (operation, maintenance)
- Case studies on practical examples, soft tools (Cymdist, Cyme, and DlgSLIENT) and group discussions

Prerequisite

- Basic understanding of electrical systems and distribution networks.

Audience

- Electrical engineers, technicians, operators, and students in the domain of electrical systems and distribution networks.

Advantages

- Understanding of the operation of electrical systems, and distribution networks.
- Develop the Skills and knowledge necessary to operate and maintain interconnected distribution networks.

Duration
2 days

1.2. Isolated grid-based networks

Objective

- Provide an understanding of the functions and operation of isolated distribution networks.
- Equip participants will understand the differences between inter-connected and isolated electrical distribution networks.
- Explore the challenges and opportunities facing electrical distribution networks in the context of the transition to a more sustainable energy future.
- Learn from case studies and group exercises that illustrate real-world challenges and solutions in the operation of Isolated distribution networks.

Prerequisite

- Basic understanding of electrical systems and distribution networks.

Content

- Overview of isolated distributions networks
- Components of isolated distribution networks and their functions
- Characteristics, types, and isolated system design
- Operation and maintenance of isolated distribution networks
- Protection and Switchgear in distributions
- Fault Analysis and fault detection techniques
- Electrical distribution Network Planning
- Load forecasting, peak demand, network analysis, and network optimization
- Safety regulations, procedures, and precautions
- Future developments and trends in digital control systems
- Case studies on practical examples and group discussions

Audience

- Electrical engineers, technicians, operators, and students in the domain of electrical systems and distribution networks.

Benefits

- Gain knowledge and skills related to the design, operation, and maintenance of isolated distribution networks.
- Understand the differences between interconnected and isolated electrical distribution networks.
- Stay up to date with emerging trends and technologies in electrical distribution networks.

Duration
1 day

1.3. Automation and control and distribution networks

Objective

- Provide an understanding of the principles and components of automation and control systems in distribution networks.
- Learn how to monitor, control, and protect the distribution network using modern supervision and control tools.
- Understand the importance of automation and control in improving the reliability, efficiency, and safety of distribution networks.
- Gain practical knowledge and skills in designing, installing, testing, and maintaining automation and control systems in distribution networks.

Content

- Introduction to automation and control systems in distribution networks
- Components of automation and control systems
- Data acquisition and processing
- Remote terminal units (RTUs) and programmable logic controllers (PLCs).
- SCADA systems for distribution networks
- Control strategies for distribution networks (voltage control, reactive power control, frequency control, load shedding,)
- Protection schemes for distribution networks (overcurrent protection, differential protection, distance protection, ...)
- Fault detection, isolation, and restoration in distribution networks
- Design and installation of automation and control systems in distribution networks.
- Maintenance and troubleshooting of automation and control systems in distribution networks.
- Case studies and best practices in automation and control of distribution networks.

Prerequisite

- Basic understanding of electrical distribution networks, power system components and operations, and basic computer skills.

Audience

- Electrical engineers, control engineers, automation engineers, system operators, maintenance personnel, students, and anyone involved in the supervision and control of electrical distribution networks.

Benefits

- Better understanding of automation and control systems for distribution networks
- Learn how to optimize the operation and maintenance of distribution networks through automation and control.
- Acquire practical skills through hands-on exercises and simulations.

Duration
2 days

2. Telecommunications for distribution networks

Objective

- Provide an understanding of the main types of telecommunications systems used in electrical distribution networks.
- Understand the role of telecommunications in the operation and control of distribution networks
- Learn about the challenges and opportunities of implementing telecommunications systems in distribution networks
- Identify best practices and case studies in the use of telecommunications in distribution networks

Prerequisite

- Basic understanding of electrical distribution networks and telecommunications

Content

- Introduction to telecommunications in distribution networks
- Main components of a telecommunications
- Types of telecommunications systems in distribution networks (e.g., SCADA, DMS, AMI)
- Overviews of SCADA, DMS, and AMI systems
- Communication protocols and standards used in electrical distribution networks.
- Design considerations for telecommunication systems in distribution networks
- Implementation of telecommunication systems in distribution networks
- Maintenance and troubleshooting of telecommunication systems for distributions
- Regulations and standards governing communication systems for distributions
- Role of telecommunications in ensuring the reliability and stability of electrical distribution networks
- Latest advancements in telecommunications technology for distributions
- Security challenges and solutions in telecommunications systems
- Best practices and case studies for ensuring the reliability and security of telecommunications systems in distribution networks.

Audience

- Electrical engineers, technicians, managers, students, and other professionals who work with electrical distribution networks.

Benefits

- Gain the deeper understanding of the importance of telecommunications in electrical distribution networks.
- Understand the role of telecommunications in ensuring the reliability and stability of electrical distribution networks, leading to cost savings and better service for customers.
- Stay up to date with the latest advancements in telecommunications technology used in electrical distribution networks.

Duration
1 day



Electrical Systems Planning

1. Generation master plan

Objective

- Provide an understanding of the importance of a generation master plan in overall electrical system planning.
- Develop skills in creating and implementing a generation master plan
- Provide insight into the regulatory framework and policies related to the generation master plan.
- Develop practical skills through group exercises and case studies.

Prerequisite

- Basic understanding of electrical systems, planning, and economic calculations.

Content

- Overview of generation master plan and its role in the energy mix
- Differences between short-term and long-term generation planning
- Methodology for creating the generation master plan
- Electricity demand forecasting (short and long-term)
- Assessment of the current and future demand for electricity
- Assessment of the existing power generation infrastructure and its capacity
- Identification of potential power generation sources and technologies
- Advantages and disadvantages of different power generation technologies
- Integrations of renewable energy into the generation master plan
- Economic calculation and cost-effectiveness of generation master plan
- Mix generation technique and optimization
- Regulatory framework and policies related to the generation master plan
- Case examples of generation master plan and group discussions

Audience

- All Professionals in the field of electrical system planning, including engineers, planners, economists, policymakers, students, and consultants.

Benefits

- Gain comprehensive understanding of the generation master plan and its importance in electrical system planning.
- Learn techniques for creating and implementing a generation master plan.
- Develop skills in analyzing factors affecting the selection of generation technologies.

Duration
2 days

2. Transmission master plan

Objective

- Provide an understanding of the electrical transmission master planning process
- Equip participants with the knowledge and skills required to develop an electrical infrastructure and transmission master plan
- Explore the latest technologies and practices in electrical transmission master planning
- Provide participants with a practical understanding of the technical, economic, and environmental considerations involved in electrical transmission master planning
- Develop practical skills through group exercises and case studies

Prerequisite

- Basic knowledge of transmission networks and economic calculation.

Content

- Overview of transmission network master planning
- Forecasting electricity demand and load growth
- Transmission network design and optimization
- Transmission system reliability and security
- Environmental and social considerations in transmission master planning
- Economic calculation and cost-effectiveness of electrical transmission master planning
- Suitable connections of renewable energy sources
- Emerging technologies in transmission master planning
- Regulatory framework and policies related to transmission master plan
- Review and evaluation of transmission master plan development process
- Real-life examples of transmission master plans and group exercises on technical problems in transmission lines.

Audience

- All Professionals in the field of transmission network planning, including engineers, planners, policymakers, students, and consultants.

Benefits

- Knowledge and skills in electrical transmission master planning
- Improve decision-making abilities in transmission network planning and design.
- Understanding of the latest technologies and best practices in electrical transmission master planning.

Duration
2 days

3. Distribution master plan

Objective

- Provide the principles and methodologies of electrical distribution master planning.
- Learn how to develop a comprehensive electrical distribution master plan.
- Gain insight into best practices and case studies in electrical distribution master planning
- Identify potential challenges and solutions in electrical distribution master planning.

Prerequisite

- Basic knowledge of distribution networks and economic calculation.

Content

- Overview of distribution master planning
- Principles and methodologies of distribution master planning
- Data collection and analysis for electrical distribution master planning
- Load forecasting and demand estimation in electrical distribution master planning
- Design and optimization of electrical distribution networks
- Reliability and resiliency considerations in electrical distribution master planning
- Economic calculation and cost-effectiveness of electrical distribution master planning
- Implementation and monitoring of electrical distribution master plans
- Regulatory and policy frameworks in electrical distribution master planning
- Real-life examples of electrical distribution master planning
- Group exercises and discussions on electrical distribution master planning

Audience

- All Professionals in the field of distribution network planning, including engineers, planners, policymakers, students, and consultants.

Benefits

- Develop skills and knowledge in electrical distribution master planning.
- Improve decision-making in electrical distribution planning and operations.
- Understanding of the latest technologies and best practices in distribution master planning.

Duration
3 days



Renewable energies

1. Renewable energy and its constraints, brakes, and barriers

Objective

- Distinguish the different forms of renewable energy production and their integration into existing energy infrastructure.
- Provide an understanding of the challenges and barriers facing the adoption and integration of renewable energy technologies including policy, financial, technical, and social barriers.
- Learn and explore solutions and strategies to overcome these constraints and promote the adoption and integration of renewable energy.

Prerequisite

- Basic knowledge of renewable energy technologies and their applications
- Knowledge of the operation of electricity networks and the planning of production/consumption balances

Content

- Introduction to renewable energy technologies and their benefits
- Types of renewable energies (solar, wind, hydro, Biomass, and geothermal)
- Predictions/forecast of renewable energy power.
- Understand the technical and financial characteristics of each solution
- Technical barriers and constraints to renewable energy adoption and integration
- Policy and regulatory barriers to renewable energy development
- Financial barriers to renewable energy investment and financing
- Social barriers to renewable energy adoption and acceptance
- Strategies and solutions to overcome constraints and barriers
- Cost-benefit analysis of renewable energy projects
- Latest development and renewable energy market
- Case studies and best practices of successful renewable energy projects integration in electrical network

Audience

- All professionals in the area of planning the development of renewable energy.
- Policymakers, Investors, and government officials are responsible for renewable energy policy and regulation.

Benefits

- Gain the deeper knowledge of renewable energy generation and its characteristics.
- Improve capacity to identify and overcome constraints and brakes on renewable energy development.
- Stay up to date with the latest advancements in renewable energies.

Duration
2 days

2. Solar energy technologies and applications

Objective

- Provide a fundamental understanding of solar energy technologies and their applications.
- Know the advantages, disadvantages, and limitations of each solar technology.
- Learn about the latest developments and trends in solar energy technologies.
- Develop practical skills through group exercises and case studies.

Prerequisite

- Basic knowledge of solar technologies

Content

- Introduction to solar energy technologies and their potential
- Types of solar technologies and their applications
- Solar Photovoltaic (PV) technologies
- Solar thermal technologies
- Hybrid solar systems
- Price comparison of Solar technologies
- Advantages, disadvantages, and limitations of each solar technology.
- Comparison and utilization of different solar technologies
- Technical barriers and constraints in solar projects
- Solar energy market and the latest development
- Case studies of different solar projects implemented and group exercises.

Audience

- Engineers, technicians, students, energy consultants, architects, and building professionals interested in sustainable design and solar energy technologies.

Benefits

- Gain the comprehensive understanding of solar energy technologies.
- Develop skills in solar energy technologies.
- Improve career prospects in the growing solar energy industry.
- Participate in energy transition and Improve sustainability for communities.

Duration
2 days

3. PV systems

Objective

- Provide a comprehensive understanding of solar PV technology.
- Know about solar PV applications including residential, industrial, and utility-scale.
- Learn how to design, install, and maintain PV systems.
- Identify key PV design considerations and planning
- Learn how to design PV systems with simulation tools.

Prerequisite

- Basic knowledge of solar PV technologies and electrical systems

Content

- Introduction to PV systems: history, and principles
- Types of PV systems and technologies comparison
- Components of PV systems (solar panels, batteries, inverters, charge controllers)
- System sizing and design
- Rooftop and ground mounting configurations.
- Solar radiation potential and site assessments
- System installation and commissioning
- Maintenance and troubleshooting
- Stand-alone and grid integrations PV systems
- Safety standards
- Financial and economics cost considerations
- Case studies of PV system design for residential applications on CALSOLPLUS software

Audience

- Engineers, technicians, energy consultants, students, architects, and building professionals interested in incorporating solar PV technology into residential buildings, and industrial and utility-scale applications.

Benefits

- Enhance knowledge and skills in solar PV technologies and their applications.
- Improve career prospects in the growing solar energy industry.
- Reduce energy costs and carbon emissions by installing solar PV.
- Participate in energy transition and Improve sustainability for communities.

Duration
3 days

4. Solar PV system monitoring and control

Objective

- Provide the comprehensive understanding of solar PV system monitoring and control technology.
- Learn how to use tools and techniques for monitoring and controlling solar systems, including remote monitoring, data acquisition, and control algorithms.
- Learn how to use SCADA for PV system optimization.

Prerequisite

- Basic knowledge of solar PV technologies and electrical systems
- Basic knowledge of SCADA

Content

- Introduction to solar system monitoring and control technology
- SCADA system and its benefits.
- Managing and optimizing solar PV systems using SCADA
- SCADA security and control
- SCADA communications network
- Data acquisition and analysis
- Remote monitoring and control
- Maintenance and troubleshooting
- Performance optimization
- Safety and regulatory compliance
- Case studies and best practices for PV systems

Audience

- Engineers, technicians, environmental, energy consultants, students, architects, and building professionals interested in expanding their skills and knowledge in monitoring and control systems.

Benefits

- Enhance knowledge and skills in solar system monitoring and control.
- Develop expertise in the efficiency and performance of solar energy systems through effective monitoring and control.
- Reduce maintenance and repair costs through early detection and resolution of system issues.

Duration
2 days

5. Solar thermal system design

Objective

- Provide the comprehensive understanding of solar thermal technologies.
- Know about water and space heating applications including residential, industrial, and utility-scale solar applications.
- Learn how to install and maintain solar thermal systems.
- Learn how to design solar thermal systems with simulation tools.

Prerequisite

- Basic knowledge of the solar thermal system for space and water heating

Content

- Overview of solar thermal technologies and its components
- Types of solar thermal technologies for space and water heating
- Solar radiation and site analysis for thermal systems
- Rooftop and ground mounting configurations.
- System installation and commissioning
- Maintenance and troubleshooting
- Performance monitoring and optimization
- Thermal energy storage and backup systems
- System design, sizing, and simulation
- Financial and economics cost considerations
- Case studies of solar thermal system design for residential and industrial heating applications

Audience

- Engineers, HVAC technicians, energy consultants, students, architects, and building professionals interested in incorporating solar thermal technology into residential buildings, and industrial and utility-scale solar applications.

Benefits

- Enhance knowledge and skills in solar thermal technologies and their applications in residential buildings, industrial and utility-scale solar applications.
- Improve skills in the growing solar thermal energy industry.
- Reduce heating energy costs and carbon emissions for buildings.
- Participate in energy transition and Improve sustainability for communities.

Duration
2 days

6. Energy storage

Objective

- Provide the comprehensive understanding of energy storage systems, and their latest developments and trends.
- Learn the different applications of energy storage in electrical engineering, renewable energies, and transport.
- Develop skills in the adoption of renewable energy sources through energy storage.
- Learn practically from Case studies and hands-on exercises on energy storage.

Prerequisite

- Basic knowledge of energy storage
- Basic knowledge of electrical, thermal, mechanical, and chemical engineering

Content

- Overview of energy storage technologies
- Types of energy storage systems (electrical, thermal, mechanical, chemical, hydrogen)
- Purpose, process, and road map of energy storage
- Short and long terms applications of energy storage
- Battery technologies and their performance parameters
- Role of energy storage systems in renewable energies (solar, wind, ...)
- Peak shaving of renewables with energy storage
- Role of energy storage in transportation (bus, rail, marine, EV, moto, bikes...)
- Energy storage with electrical systems (grid, substation, control equipment)
- Safety and hazard management
- Latest developments and trends in energy storage
- Case studies of different storage systems and group discussions


Audience

- Engineers, managers, students, operators, technicians, building designers, environmental, and energy consultants, and professionals interested in energy storage systems, their operations, and the latest trends.

Benefits

- Enhance knowledge and skills in energy storage technologies.
- Increased efficiency and reliability of energy systems through effective energy storage.
- Improve career prospects in the growing energy industry.
- Reduce energy costs and carbon emissions using renewable energy with energy storage.

Duration
3 days

A hand is shown turning a dial on a dark background. The dial has a green needle pointing towards the 'HIGH EMISSIONS' label, which is written in red. The dial also features a yellow and orange arc. The text 'CO2' is visible on the dial. The background is dark blue with a subtle grid pattern.

Energy Efficiency (energy audit, ISO 50001, carbon footprint)

1. Energy efficiency, energy audit, ISO 50001, energy management system

Objective

- Provide the comprehensive understanding of the concept of energy efficiency and the importance of carrying out energy efficiency programs.
- Learn participants how to identify the sources of energy saving in the industry in terms of the type of energy, processes or production lines, type of machine, etc.
- Introduce participants the energy audit according to international standards.
- Understand the principles of energy management systems (ISO 50001 standard).
- Learn practically from case studies and hands-on exercises on energy efficiency, energy audit, and energy management system.

Prerequisite

- Basic knowledge of energy systems
- Basic knowledge of electrical and thermal engineering

Content

- Energy notions (thermal and electrical)
- General information on energy uses (compressed air, motorization, buildings, heating, cooling, pumping, ventilation, lighting, etc.)
- Energy efficiency
- Regulatory energy audit – main principles
- ISO 50001 – main principles
- Quantification of sources of energy gains
- Implementation of an energy efficiency action plan
- Follow-up and monitoring (IMVP method, performance indicators, etc.)
- Case studies and practical exercises

Audience

- Engineers, managers, students, operators, technicians, Maintenance managers, production managers, energy manager

Benefits

- Enhance knowledge and understanding of energy efficiency.
- Improve career prospects in energy efficiency.
- Develop the skills to implement and manage energy efficiency action plans.
- Increased awareness of energy-efficient practices and technologies, especially in the industrial field.

Duration
5 days

2. Carbon footprint

Objective

- Provide the comprehensive understanding of greenhouse gases (GHG).
- Understand the relationship between energy consumption and GHGs.
- Participants will discover methods for calculating GHGs and establishing a carbon footprint.

Content

- Overview of Carbon footprint
- What are the greenhouse gases to be accounted for?
- International standards and regulations (some principles and examples)
- Notion of perimeter and scope
- How to calculate CO2 emissions in a carbon report? Physical and monetary ratios
- How to reduce your carbon footprint
- Case studies and group exercises

Prerequisite

- Basic Knowledge of energy sectors and greenhouse gases.

Audience

- Engineers, managers, students, operators, technicians, Maintenance managers, production managers, and energy manager

Benefits

- Enhance knowledge and understanding of Carbon footprint.
- Know how to calculate greenhouse gas emissions and establish the carbon footprint.
- Improve career prospects on carbon footprint and energy sector.

Duration
1 day

Energy Efficiency in building



1. Building design

Objective

- Provide the comprehensive understanding of the fundamental principles of building design and construction.
- Learn participants how to integrate sustainable design practices into the building design process.
- Introduce participants to the use of energy-efficient and environmentally sustainable building materials and systems.
- Learn practically from case studies and hands-on exercises on building design.

Prerequisite

- Basic knowledge of building design.

Content

- Introduction to building design principles
- Building envelope and insulation
- Building orientation and shading
- Indoor environmental quality of building
- Energy-efficient HVAC systems
- Lighting, electrical, and thermal systems
- Water efficiency and conservation
- Sustainable materials and construction practices
- Site planning and landscape design
- Green building certification and rating systems
- Case studies of different buildings and group exercises

Audience

- Architects, engineers, students, building owners, operators, facilities managers, and other design professionals involved in building design.

Benefits

- Enhance knowledge and skills in sustainable building design principles and practices.
- Improve career prospects in the growing sustainable building and green construction industries.
- Develop skills in energy efficiency and cost savings in buildings.
- Reduce carbon emissions through the adoption of sustainable building practices.

Duration
2 days

2. Building environment

Objective

- Provide the comprehensive understanding of the importance of the building environment and how it affects the health, well-being, and productivity of occupants.
- Learn participants how to evaluate, analyze, and improve the building environment.
- Provide participants with the necessary skills and knowledge to implement and manage effective building environment programs.
- Learn practically from case studies and hands-on exercises on building environments.

Prerequisite

- Basic knowledge of building construction and systems

Content

- Overview of building environment and its parameters
- Indoor air quality and ventilation
- Thermal comfort and energy efficiency
- Lighting and daylighting
- Acoustics and noise control
- Water conservation and management
- Green building materials and sustainability
- Building envelope and insulation
- Waste reduction and management
- Biophilic design and nature integration
- Human factors and ergonomics
- Real case studies on building environment and group discussions

Audience

- Architects, engineers, students, building owners, operators, and facilities managers are interested in the indoor environment and energy use of buildings.

Benefits

- Enhance knowledge and understanding of building environment principles and practices.
- Develop skills in indoor environmental quality and comfort for building occupants.
- Increase compliance with sustainability and environmental regulations and standards.

Duration
2 days

3. Building energy auditing

Objective

- Provide the skills needed to conduct energy audits of buildings.
- Introduce participants to the latest trends and developments in the building energy auditing process and technology.
- Learn practical cases of building energy audits and hands-on exercises.

Prerequisite

- Basic knowledge of building energy systems and consumption

Content

- Introduction to energy auditing and building performance assessment
- Building systems and energy consumption analysis
- Energy audit methodologies and tools
- Energy performance metrics and benchmarking practices
- Identification of energy-saving opportunities and evaluation of cost-effectiveness
- Building envelope analysis and recommendations for improvements
- HVAC, lighting, and plug load analysis and recommendations for improvements
- Renewable energy integration options
- Developing energy audit reports and recommendations
- Case studies on energy audits of buildings and group discussions

Audience

- Architects, engineers, students, building owners, operators, and facilities managers interested in building energy auditing and energy efficiency.

Benefits

- Develop the solid understanding and skills in building energy auditing and energy efficiency measures.
- Equip participants with practical skills and tools to evaluate building energy consumption and energy losses from the buildings.
- Improve career prospects in the growing energy efficiency and sustainable building energy audit.

Duration
3 days

4. Building energy policy and regulation

Objective

- Provide an understanding of the policies and regulations that govern building energy use at the national, state, and local levels.
- Learn the impact of policies and regulations on building design, construction, and operation.
- Introduce participants to best practices for compliance with building energy policies and regulations.
- Promote the adoption of energy-efficient building practices and technologies.

Prerequisite

- Knowledge of building construction and building systems.

Content

- Overview of building energy policy and regulation
- National, state, and local energy codes and standards
- Energy performance certification schemes
- Incentives and financing programs for energy-efficient buildings
- Public procurement and green building practices
- Building performance reporting and data collection
- Carbon reduction policies and programs
- Innovative approaches to building energy policy and regulation
- Case studies and best practices from different regions

Audience

- Architects, engineers, energy consultants, students, building owners, operators, Policymakers, and government officials involved in the development and implementation of building energy policy and regulation.

Benefits

- Enhance knowledge and understanding of building energy policy and regulation.
- Improve career prospects in the energy and environmental sectors.
- Increase compliance with building energy policies and regulations.
- Increase awareness of energy-efficient building practices and technologies.

Duration
2 days



Economic and financial studies

1. Economic and financial studies

Objective

- Provide the fundamental principles of economic and financial analysis, which include understanding the project lifecycle, evaluating economic and financial statements, and using time value of money principles to make investment decisions.
- Learn the necessary skills to evaluate investment projects using relevant economic and financial metrics and tools.
- Learn how to evaluate investment proposals using techniques such as payback period, net present value (NPV), and internal rate of return (IRR).
- Learn how to develop investment proposals that are supported by solid economic and financial analysis.

Prerequisite

- Basic knowledge of financial statements and accounting principles

Content

- Introduction to economic and financial analysis
- Investment project cycle
- Principles of economic analysis
- Understanding financial statements
- Time value of money and discounting
- Investment appraisal techniques
- Cost-benefit analysis
- Payback period, Net present value (NPV), Internal rate of return (IRR)
- Sensitivity analysis
- Risk and uncertainty in Investment appraisal
- Investment proposal development and presentation
- Case studies and practical exercises

Audience

- Engineers, project managers, financial analysts, business development executives, students, energy consultants, and professionals interested in the development and evaluation of investment projects and expanding their knowledge of economic and financial analysis.

Benefits

- Gain the solid understanding of economic and financial analysis, which will enable them to make better-informed investment decisions.
- Equip participants with practical skills and tools to evaluate and develop investment proposals.
- Enhance the participant's ability to communicate their investment proposals effectively to stakeholders.

Duration
3 days

PRICE OF TRAINING

	Title of training	Number of Days	Price	Date of session	Number of trainees
TRANSMISSION NETWORKS	Transmission Networks: Main Principles And Their Components	5	17 500 €	Contact us	Whole group (5 to 8)
	Numerical Command Control Of High-voltage Substations	2	9 000 €	Contact us	Whole group (5 to 8)
	Telecommunications For Transmission Networks	2	9 000 €	Contact us	Whole group (5 to 8)
	Supervision And Remote Control Of Transmission Networks (Aems)	3	10 500 €	Contact us	Whole group (5 to 8)
	Role Of Operators In Dispatching And Team Organization	2	9 000 €	Contact us	Whole group (5 to 8)
DISTRIBUTION NETWORKS	Distribution Networks: Main Principles And Their Components	5	17 500 €	Contact us	Whole group (5 to 8)
	Telecommunications For Distribution Networks	1	3 500 €	Contact us	Whole group (5 to 8)
ELECTRICAL SYSTEMS PLANNING	Generation Master Plan	2	9 000 €	Contact us	Whole group (5 to 8)
	Transmission Master Plan	2	9 000 €	Contact us	Whole group (5 to 8)
	Distribution Master Plan	3	13 500 €	Contact us	Whole group (5 to 8)
RENEWABLE ENERGIES	Renewable Energy And Its Constraints, Brakes, And Barriers	2	7 000 €	Contact us	Whole group (5 to 8)
	Solar Energy Technologies And Applications	2	7 000 €	Contact us	Whole group (5 to 8)
	PV Systems	3	10 500 €	Contact us	Whole group (5 to 8)
	Solar PV System Monitoring And Control	2	7 000 €	Contact us	Whole group (5 to 8)
	Solar Thermal System Design	2	7 000 €	Contact us	Whole group (5 to 8)
	Energy Storage	3	10 500 €	Contact us	Whole group (5 to 8)
ENERGY EFFICIENCY (ENERGY AUDIT, ISO 50001, CARBON FOOTPRINT)	Energy Efficiency, Energy Audit, ISO 50001 Energy Management System	5	17 500 €	Contact us	Whole group (5 to 8)
	Carbon Footprint	1	3 500 €	Contact us	Whole group (5 to 8)
ENERGY EFFICIENCY IN BUILDING	Building Design	2	7 000 €	Contact us	Whole group (5 to 8)
	Building Environment	2	7 000 €	Contact us	Whole group (5 to 8)
	Building Energy Auditing	3	10 500 €	Contact us	Whole group (5 to 8)
	Building Energy Policy And Regulation	2	7 000 €	Contact us	Whole group (5 to 8)
ECONOMIC AND FINANCIAL STUDIES	Economic And Financial Studies	3	13 500 €	Contact us	Whole group (5 to 8)



Specific conditions of sale

1. Training Location

The trainings can be organized either in the AETS premises in Pau or in Paris.
For other places, consult us.

2. Number of trainees

The maximum number of trainees per session is eight (8).

3. The price includes

- The realization of the training;
- One paper and an electronic copy of course materials;
- Coffee breaks and lunches during the training sessions.

GENERAL TERMS AND CONDITIONS

1. Definition

Contract: a professional training agreement between AETS and the Client. This agreement may take the form of a contract in due form, a purchase order issued by the Client and validated by AETS, or an invoice issued for the implementation of vocational training actions.

2. Object and scope of application

Any Contract implies the Customer's unreserved acceptance and complete adherence to these General Terms and Conditions, which prevail over any other document of the Customer, and over any general terms and conditions of purchase. No derogation from these General Conditions shall be enforceable against AETS unless it has been expressly accepted in writing by the latter.

3. Contractual documents

The Contract will specify the title of the training, its number of participants, the location, the terms and conditions of its implementation, and its price.

4. Postponement/cancellation of a training course by AETS

AETS reserves the right to cancel or postpone planned training courses without compensation provided. AETS should inform the Client with reasonable notice.

5. Cancellation of a training course by the Client

Any training or course started is due in full, unless otherwise expressly agreed by AETS. Any cancellation of a training course at the Client's initiative must be communicated in writing at least fifteen (15) calendar days before the start of the course. Failing this, 100% of the amount of the training shall remain immediately payable by way of lump sum compensation.

6. Replacement of a participant

Regardless of the type of training, upon written request prior to the start of the training, the Client has the possibility to replace a participant without additional billing.

7. Dematerialization of media

As part of an environmental commitment, all documentation relating to training is delivered on dematerialized media.

8. Prices and regulations

The prices are indicated in the catalog. A minimum deposit of 30% must be paid by the Client after the Contract, the balance will be paid after completion of the training.

All prices are indicated in euros and exclude taxes. They are to be increased by VAT at the rate in force on the day of issue of the corresponding invoice.

Invoices shall be payable thirty (30) calendar days from the date of issue of the invoice, without discount, and to the order of AETS. Any amount not paid on the due date shall give rise to the payment by the Customer of late payment penalties equal to the interest rate applied by the European Central Bank to its most recent refinancing operation (minimum 0%) plus 10 percentage points.

These penalties shall be payable by operation of law, without prior notice of default, from the first day on which payment is late in relation to the due date for payment. In addition, in accordance with the legal and regulatory provisions in force, any sum not paid on the due date shall give rise to the payment by the Customer of a flat-rate indemnity for collection costs in the amount of forty euros (€40). This indemnity shall be due automatically, without prior formal notice, from the first day of late payment and for each invoice not paid by the due date.

9. Obligations and Liability of AETS

AETS is committed to providing training with reasonable care and diligence. As this is an intellectual service, AETS is only bound by an ob-

ligation of means. Accordingly, AETS shall only be liable for direct damages resulting from the improper performance of its training services to the exclusion of any consequential or incidental damages, consequential or otherwise. In any event, AETS overall liability, in respect of or in connection with the training, shall be limited to the total price of the training.

10. Obligations of the Client

The Customer undertakes to:

- Pay the price of the training ;
- Not to make any reproduction of material or document whose copyright belongs to AETS, without the prior written consent of AETS ;
- Do not use audio or video recording equipment during training sessions without the prior written consent of AETS.

11. Confidentiality and Intellectual Property

It is expressly agreed that any information disclosed by AETS under or in connection with the training, shall be treated as confidential (hereinafter «Information») and may not be disclosed to third parties or used for a purpose other than that of the training without the prior written consent of AETS. AETS shall have the exclusive right of ownership of all Information disclosed by AETS, regardless of the nature, medium, and method of communication, in or in connection with the Training, and AETS shall have the exclusive right of ownership of such Information. Accordingly, the Customer undertakes to keep the Information in a safe place and to provide at least the same protection measures as it usually applies to its information. The Client shall be responsible for the respect of these confidentiality and retention provisions by the Learners.

The disclosure of Information by AETS shall in no way be construed as conferring any express or implied right (whether by licence or otherwise) to the Information or any other rights in relation to intellectual and industrial property, copyright, trademarks, or trade secrets. The payment of the price does not transfer any intellectual property right in the Information.

By way of exception, AETS grants the learner, subject to the rights of third parties, a non-exclusive, non-transferable, and strictly personal license to use the training material provided, whatever the medium.

The learner has the right to make a photocopy of this material for his/her personal use for study purposes, provided that the AETS copyright notice or any other intellectual property notice is reproduced on each copy of the training material. The learner and the Client shall not be entitled to do so without the prior consent of AETS:

- To use, copy, modify, create a derivative work, and/or distribute the training material except as provided for in these Terms and Conditions ;
- To disassemble, decompile and/or translate the training material, unless otherwise provided by law and without the possibility of contractual renunciation ;
- To sub-license, rent, and/or lend the training material ;
- To use the associated material for purposes other than training.

12. Protection of personal data

AETS collects personal data in the context of training courses.

Data subjects have a right to access, rectify, delete, limit, portability, and attachment of their personal data and may at any time revoke their consent to the processing. In accordance with the essential requirement of security of personal data, AETS undertakes, in the context of the execution of its training courses, to take all useful technical and organizational measures to preserve the security and confidentiality of personal data and in particular to prevent them from being distorted, damaged, lost, misappropriated, corrupted, disclosed, transmitted and/or communicated to unauthorized persons. Therefore, AETS undertakes to:

- Process personal data only for the strict necessity of the training courses ;
- Conserve personal data for three (3) years or longer to comply with legal obligations, resolve any disputes and enforce contractual commitments.

13. Communication

The Client expressly authorizes AETS to mention its name, and logo and to mention as references the conclusion of an Agreement and any operation resulting from its application in all their commercial documents.

14. Applicable law and jurisdiction

The Agreement and all relations between AETS and its Client shall be governed by French Law. Any dispute that cannot be settled amicably within sixty (60) days from the date of the first presentation of the registered letter with acknowledgment of receipt, which the party raising the dispute must have sent to the other, shall be the exclusive jurisdiction of the Commercial Court of Pau, regardless of the location of the Client, notwithstanding multiple defendants, or appeal in warranty.

Contact Details

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